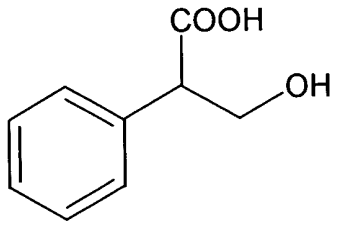
Monograph number: 9910.
Title: Tropic Acid.
CAS Registry number: [529-64-6]
CAS name(s): α-(Hydroxymethyl)benzeneacetic acid;
Additional name(s): 2-phenylhydracrylic acid; α-phenyl-β-hydroxypropionic acid; tropaic acid; tropeic acid.
Molecular formula: $C_9H_{10}O_3$;
Molecular weight: 166.18.
Percent Composition: C 65.05%, H 6.07%, O 28.88%.
Literature references: Degradation product of tropane alkaloids, esp atropine: Lossen, *Ann.* **133,** 351, 370 (1865). Resolution of isomers: McKenzie, Wood, *J. Chem. Soc.* **115,** 828 (1919). Absolute config of isomers: Fodor, Csepreghy, *ibid.* **1961,** 3222; Watson, Youngson, *J. Chem. Soc. Perkin Trans. I* **1972,** 1597. Prepn: Sletzinger, Paulsen, **U.S.** pat. **2,390,278** (1945 to Merck & Co.); Blicke, **U.S.** pat. **2,716,650** (1955 to U. of Michigan); **Ger.** pat. **923,426** (1955 to Sterling Drug). Biosynthetic studies: Louden, Leete, *J. Am. Chem. Soc.* **84,** 1510, 4507 (1962).



Derivative: (±)-Form,
Properties: needles or plates from water or benzene, mp 118° . K at 25° = 7.5×10^{-5}. Absorption spectrum: Dobbie, Fox, *J. Chem. Soc.* **103,** 1194 (1913). 1 gram dissolves in 50 ml water; freely sol in boiling water; sol in alcohol, ether, slightly in benzene; practically insol in petr ether.
Melting Point: mp 118°

Derivative: (+)-Form,
Properties: mp 107° . $[\alpha]_D^{20}$ +72° (c = 0.5 in water) .
Melting Point: mp 107°
Rotation: +72°

Properties: mp 126-128° . $[\alpha]_D^{20}$ –72° (c = 0.5 in water) .
Melting Point: mp 126-128°
Rotation: –72°

Derivative: (–)-Form,